Cardiovascular Disease Disparities & Cultural Health Programming

Existing Conditions and a Framework for Action

Wednesday, April 13, 2005

Arizona Chronic Disease Disparities Conference

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Cultural Health Initiatives
American Heart Association

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Presentation Overview

- Cardiovascular Diseases (CVD)
- The State of CVD disparities in Arizona and the United States
- Eliminating Disparities in Cardiovascular Health---Strategic Imperatives
- AHA's Cultural Health Initiative
- Heart Partners: Congestive Heart Failure program

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Cardiovascular Diseases

- Heart disease
- Stroke
- Hypertensive heart disease
- Diseases of the arteries
- Congenital anomalies of the circulatory system
- Atrial fibrillation

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Public Health Crisis: 60.8 million Americans have 1 or more CV Diseases

- High blood pressure: 50 million
- Coronary heart disease: 12.4 million
  - Myocardial infarction: 7.3 million
  - Angina pectoris: 6.4 million
- Stroke: 4.5 million
- CHF: 4.7 million

Source: 2001 Heart and Stroke Statistical Update. American Heart Association

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CVD Morbidity and Mortality

- CVD caused 1 in 2.5 deaths in 1998
- More 2600 Americans die from CVD each day
- 34% of CVD deaths occurred prematurely (before age 75)
- CVD claims almost 10,500 more lives each year than the next 6 leading causes of death combined

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Stroke Morbidity and Mortality

- Stroke causes 1 in 15 deaths annually
- 47% of stroke deaths occur out of hospital
- 20% of strokes occur in people under age 65
- Stroke is the leading cause of serious long-term disability

Source: 2001 Heart and Stroke Statistical Update. American Heart Association

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Risk Factors

Modifiable risk factors

- High blood cholesterol (≥240 mg/dL)
- High blood pressure (≥130/80 mm Hg)
- Current cigarette smoking
- Physical inactivity
- Overweight/obesity
- Diabetes

Nonmodifiable risk factors

- Gender
- Heredity (family history of CHD)
- Age

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Racial Disparities in Risk, Disease and Mortality

Risk, Disease, and Mortality

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Cardiovascular Disease in Special Populations: Facts

What We Already Know

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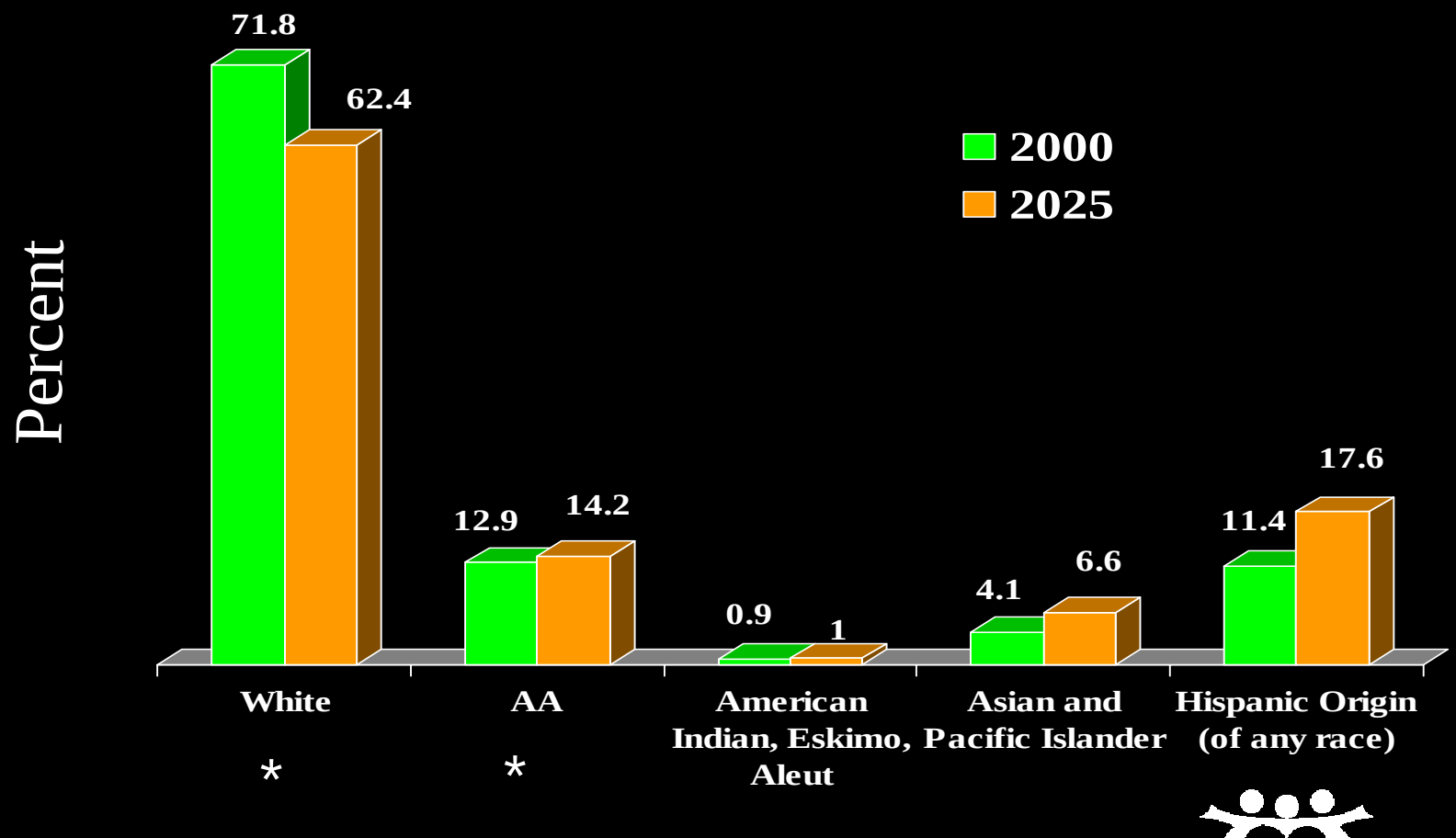
Percent of the Population by Race/Ethnicity 2000 and 2025



*Indicates non-Hispanic.
US Census Bureau, 2000.

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Risk Factors for Cardiovascular Disease and Stroke in Ethnic Minorities

- African Americans – hypertension, obesity, diabetes, metabolic syndrome
- Hispanic Americans – obesity, diabetes, metabolic syndrome
- *Native Americans – obesity, diabetes,* metabolic syndrome
- *Asian Americans - access*

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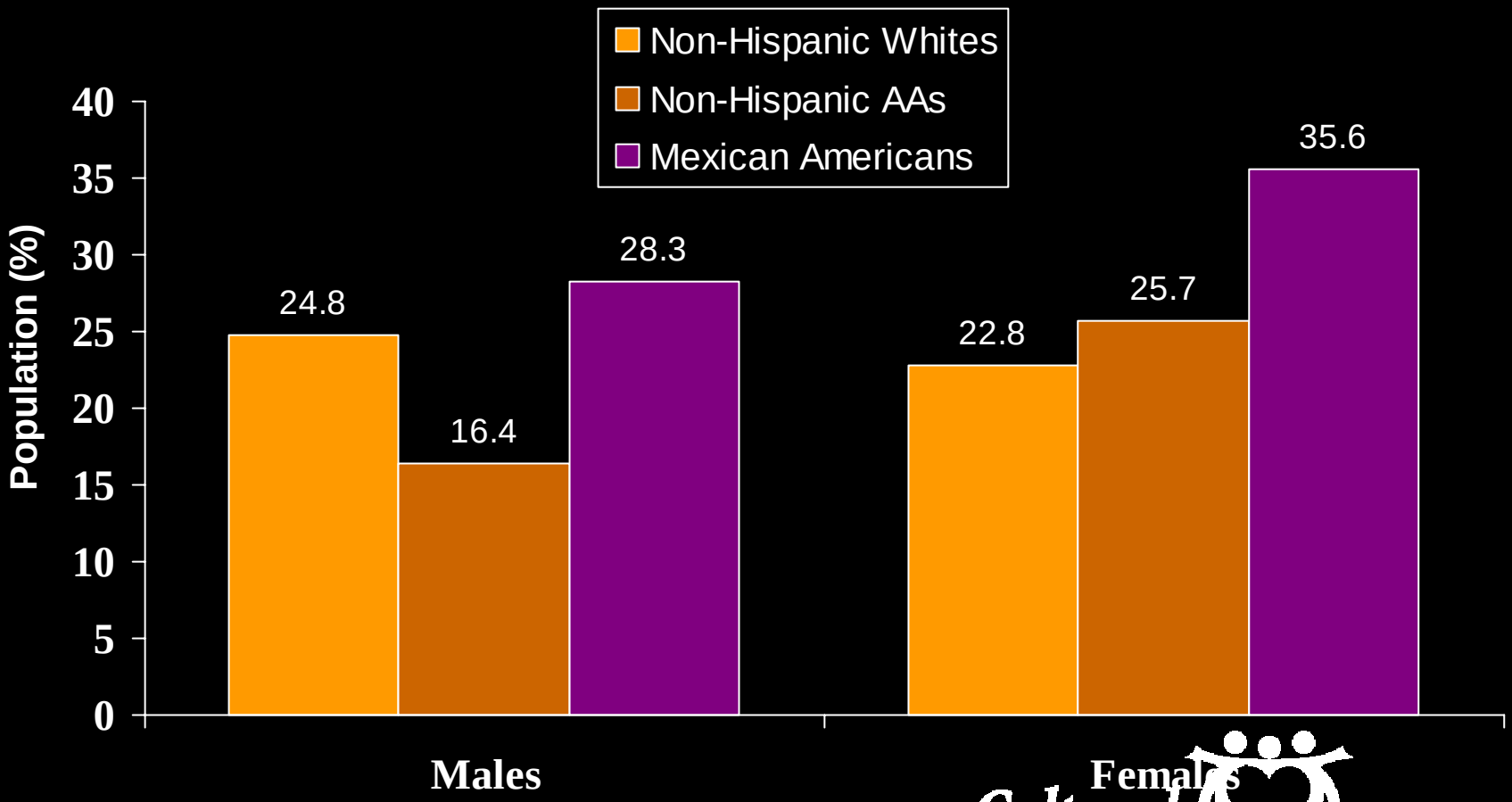
Age-Adjusted Prevalence of the Metabolic Syndrome in Americans

NHANES III: 1988-1994



Age 20 and older.
Adapted from Ford ES, et al. *JAMA.* 2002;287:356–359.

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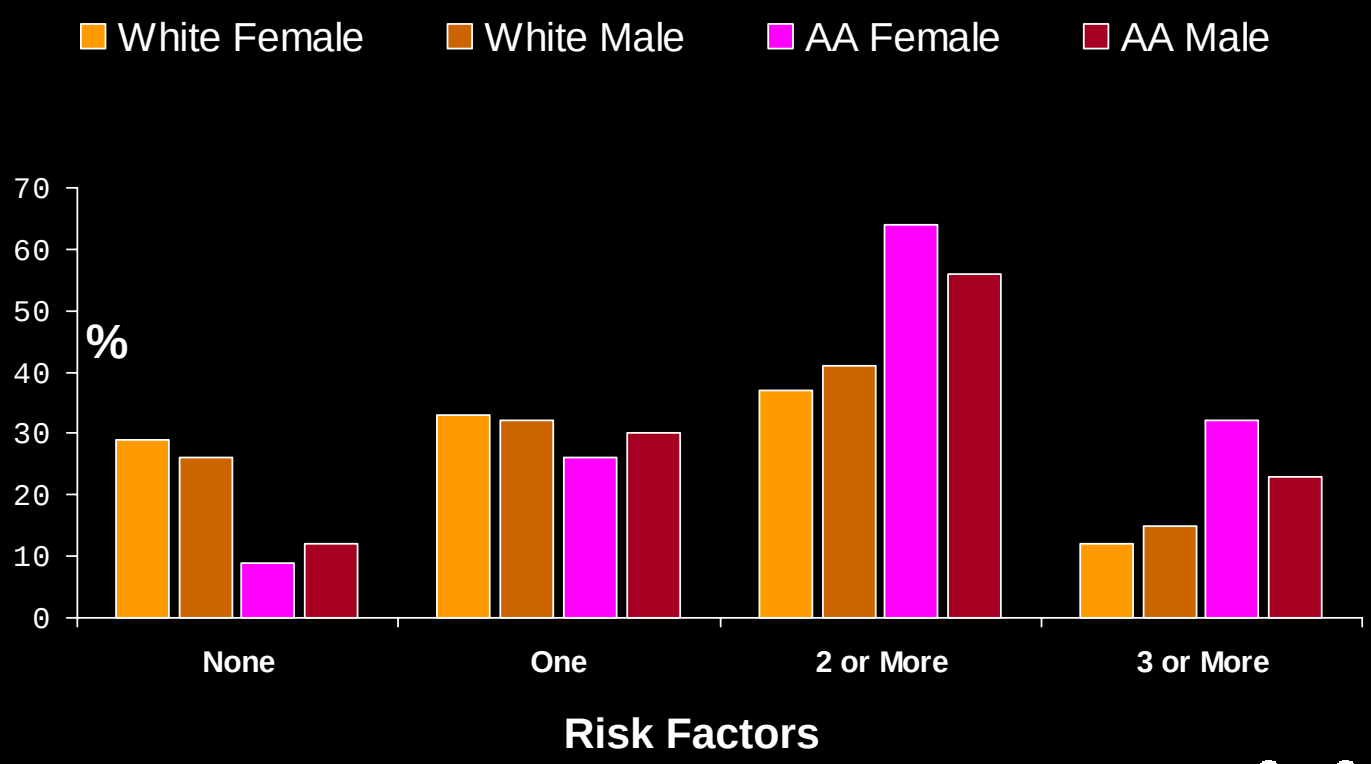
CV Risk Factor Clustering by Race and Sex



Adapted from Clark LT, et al. *Heart Dis*. 2001;3:97–108.

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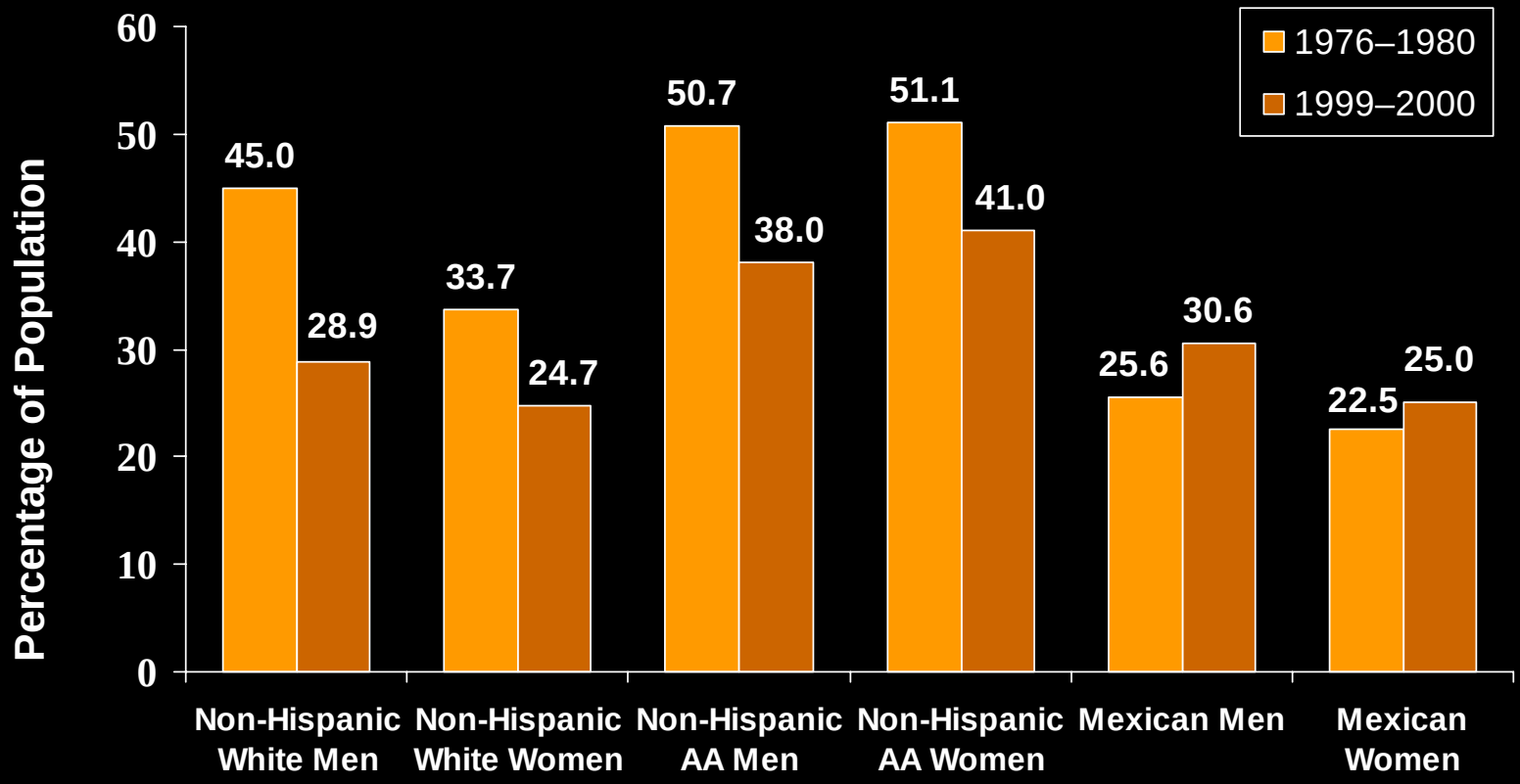
Age-Adjusted Prevalence Trends for High Blood Pressure in Americans Ages 20 to 74 by Race/Ethnicity and Sex

NHANES II & IV: 1976-1980 and 1999–2000



NHANES=National Health and Nutrition Examination Survey.
Adapted from *Heart Disease and Stroke Statistics—2004 Update.* American Heart Association; 2003:18.

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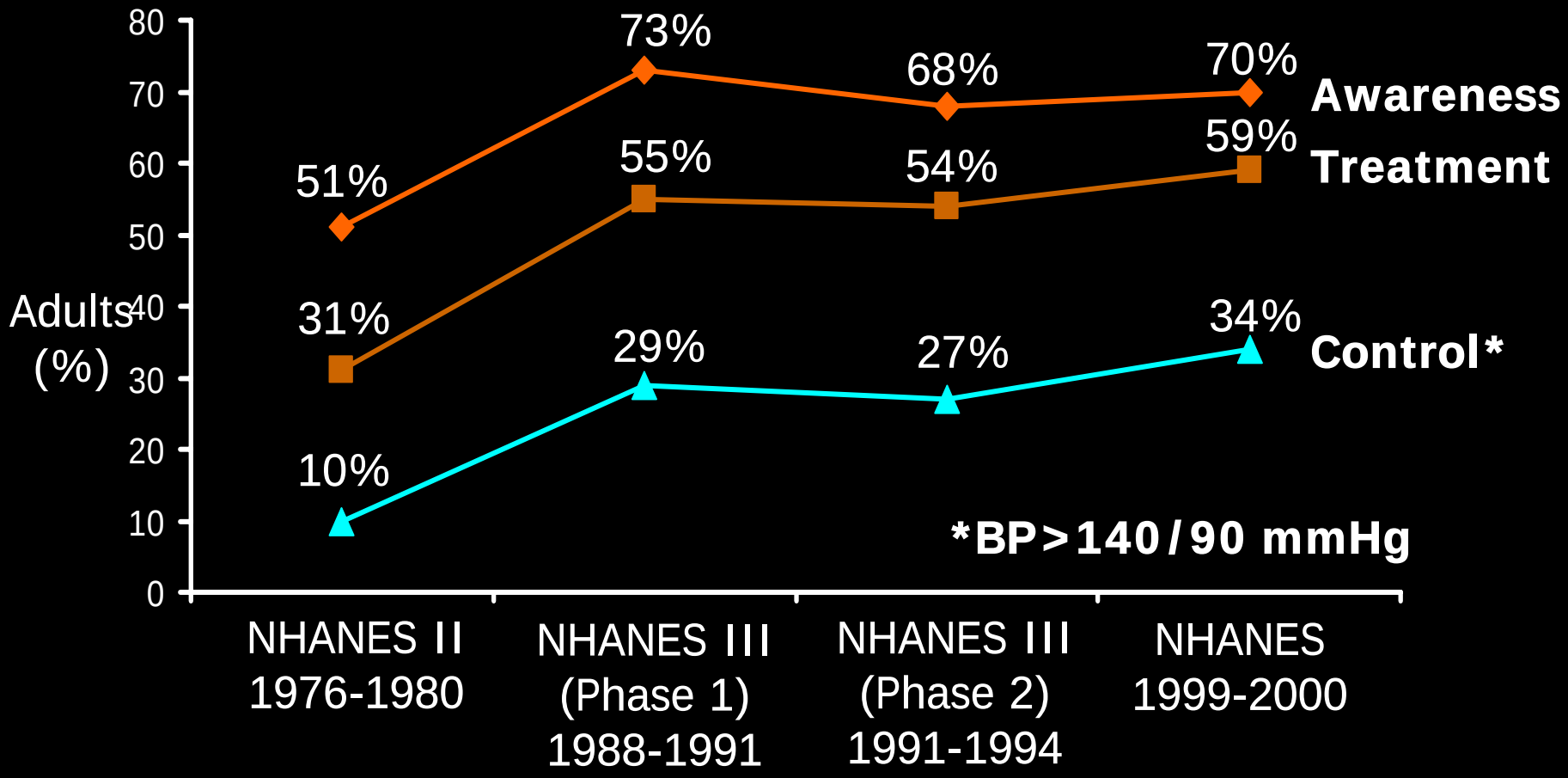
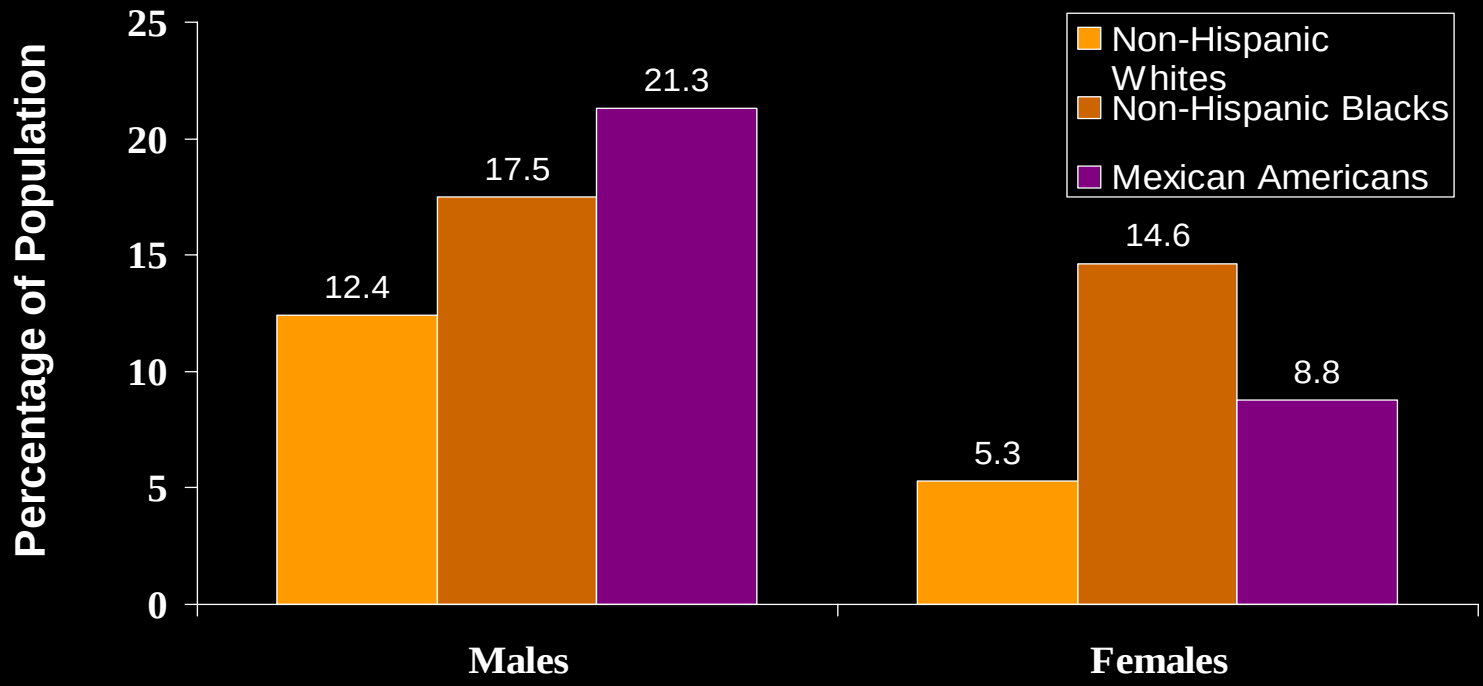
Low BP Control Rates Require Increased Awareness, More Aggressive Treatment



Adapted from Chobanian AV et al. *Hypertension*. 2003;42:1206-1252.

Prevalence of Overweight Among Students in Grades 9 to 12 by Sex and Race/Ethnicity

United States: 2001



Note: Overweight is defined as body mass index (BMI) at the 95th percentile or higher by age and sex based on the Centers for Disease Control (CDC) growth chart.

Grunbaum JA, et al. *MMWR Surveill Summ*. 2002;51:1-62.

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Disproportionate CHD/HF Risk in African Americans

- Higher prevalence of risk factors (eg, type 2 DM, ESRD, CAD)[1,2]
- Preeminence of HTN and its consequences[1]
- Higher incidence of LVH morbidity/mortality[2]
- Heterogeneity of acute cardiac syndromes[1]
- Increased cigarette use (higher-nicotine brands)[2]
- Delays in identifying high-risk individuals[1]
- Limited access to CV care[1]

HF=heart failure; ESRD=end-stage renal disease; CAD=coronary artery disease; CV=cardiovascular.

[1]Clark LT, et al. *Heart Dis.* 2001;3:97–108. [2]Ferdinand KC, et al. *Curr Hypertension Rep.* 2002;4:311–318.

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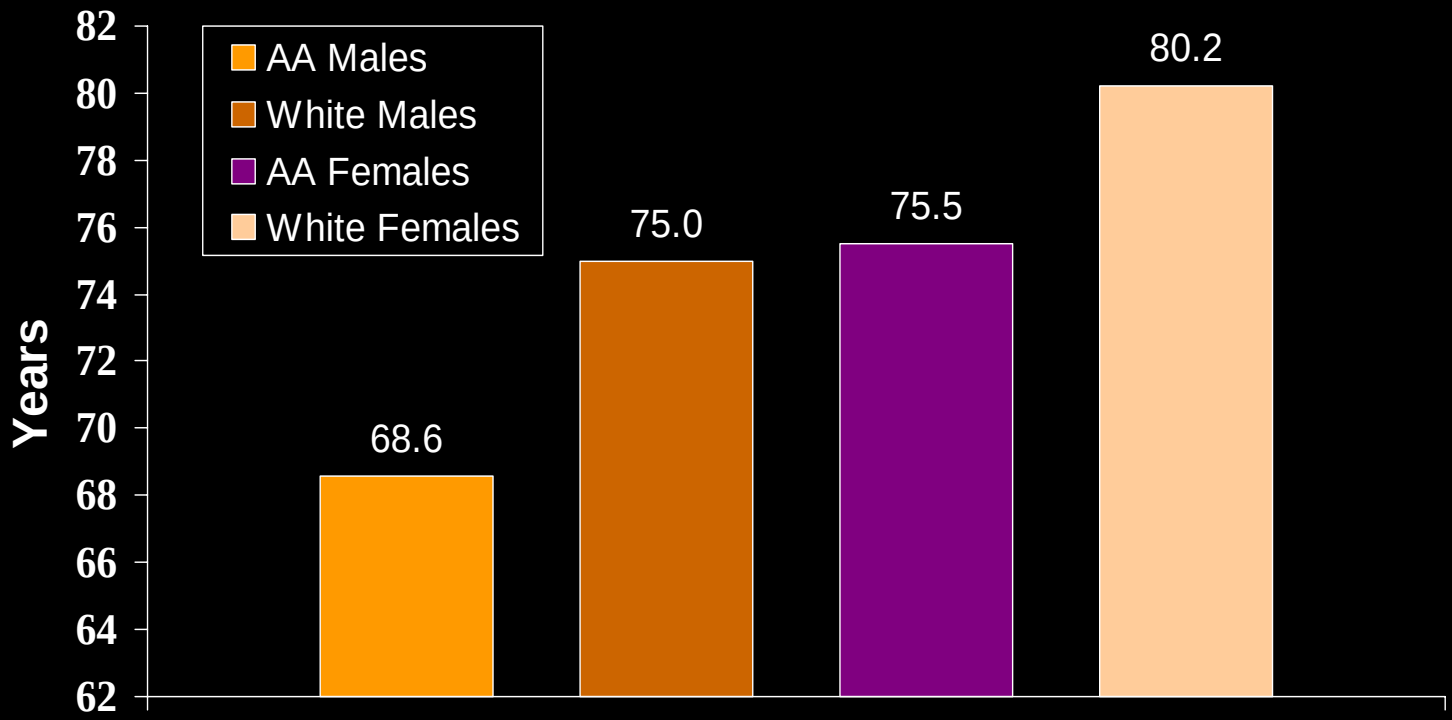
Estimated Life Expectancy: 2001



National Vital Statistics Reports. 2004;52:33–34.

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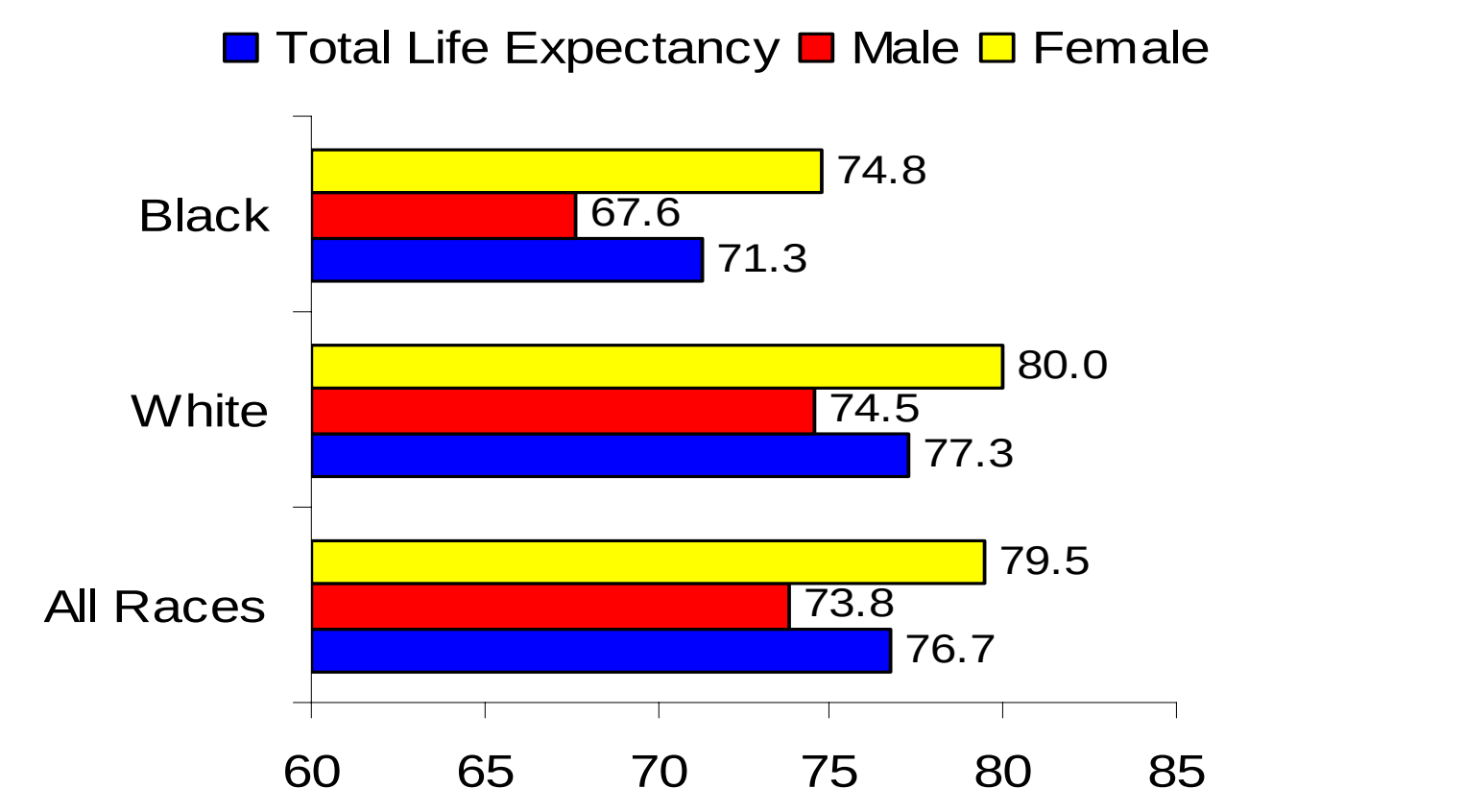
Life expectancy and years of healthy life: United States, 1998



Source: NCHS, *U.S. Vital Statistics*, 1998.

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CVD Outcomes in Ethnic Minorities

- **African Americans**
  - ***Highest*** rate of mortality due to Coronary Artery Disease (CAD); higher rates of left ventricular hypertrophy, chronic renal disease, end stage renal disease, dialysis, stroke, and death due to stroke and heart failure
- **Hispanic Americans**
  - Higher rates of diabetes; increasing Cardiovascular Disease (CVD) mortality
- **Native Americans**
  - Higher rates of diabetes; increasing CVD mortality
- **Asian Americans**
  - Increasing CVD mortality

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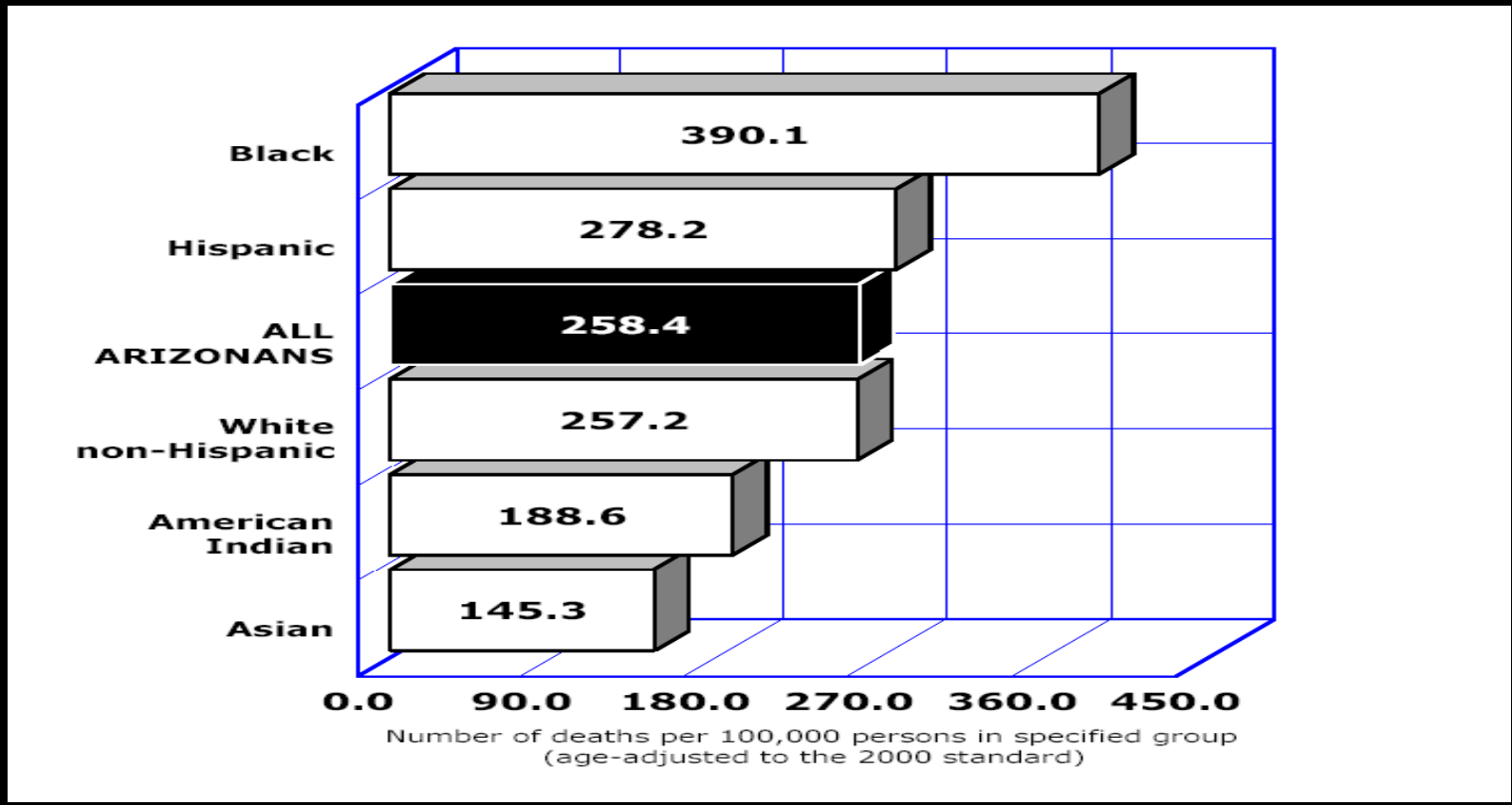
Arizona Statistics

Mortality from Cardiovascular Diseases



Differences in the Health Status Among Ethnic Groups, Arizona, 2003

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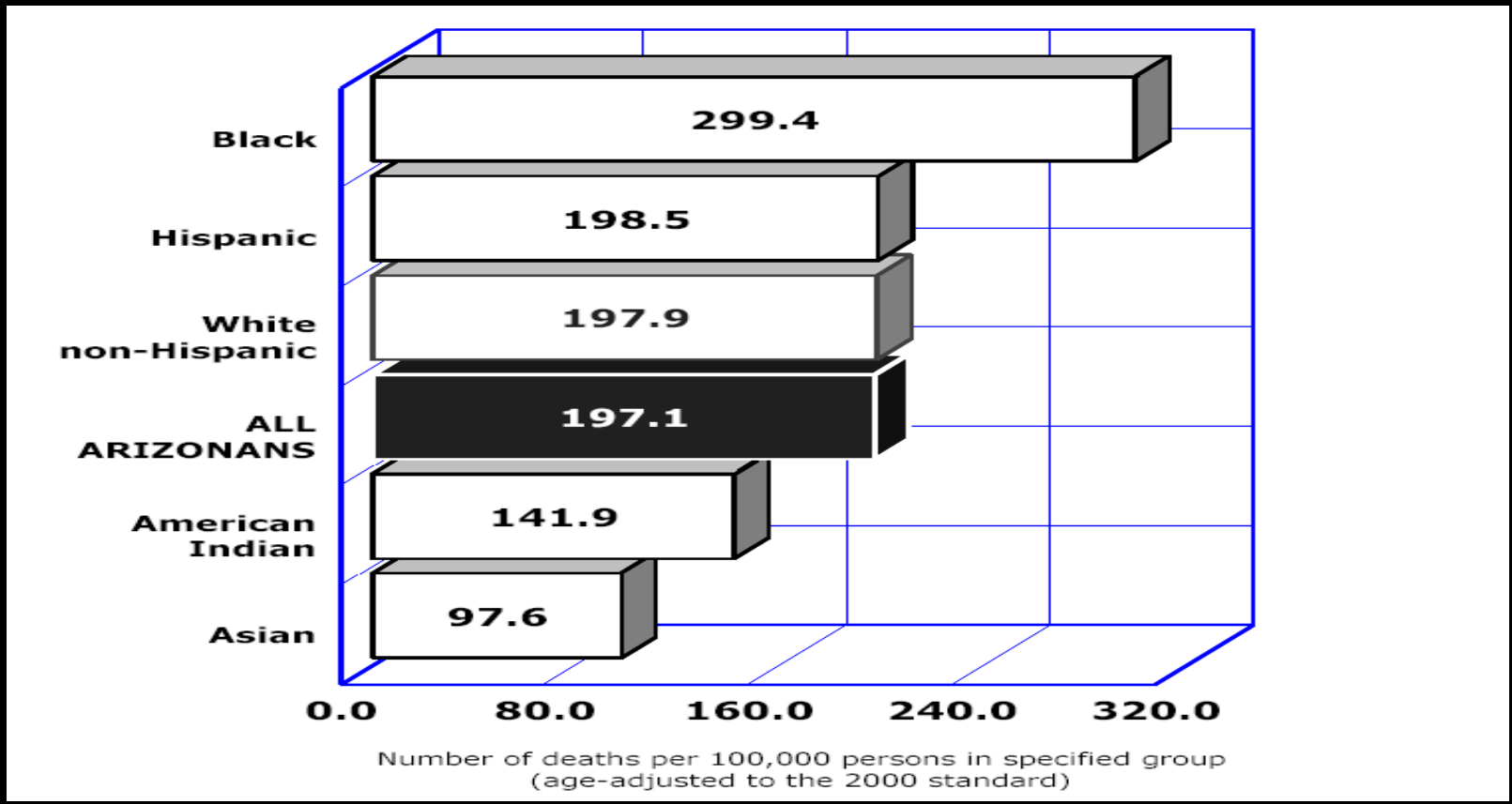
Arizona Statistics

Mortality from Diseases of the Heart



Differences in the Health Status Among Ethnic Groups, Arizona, 2003

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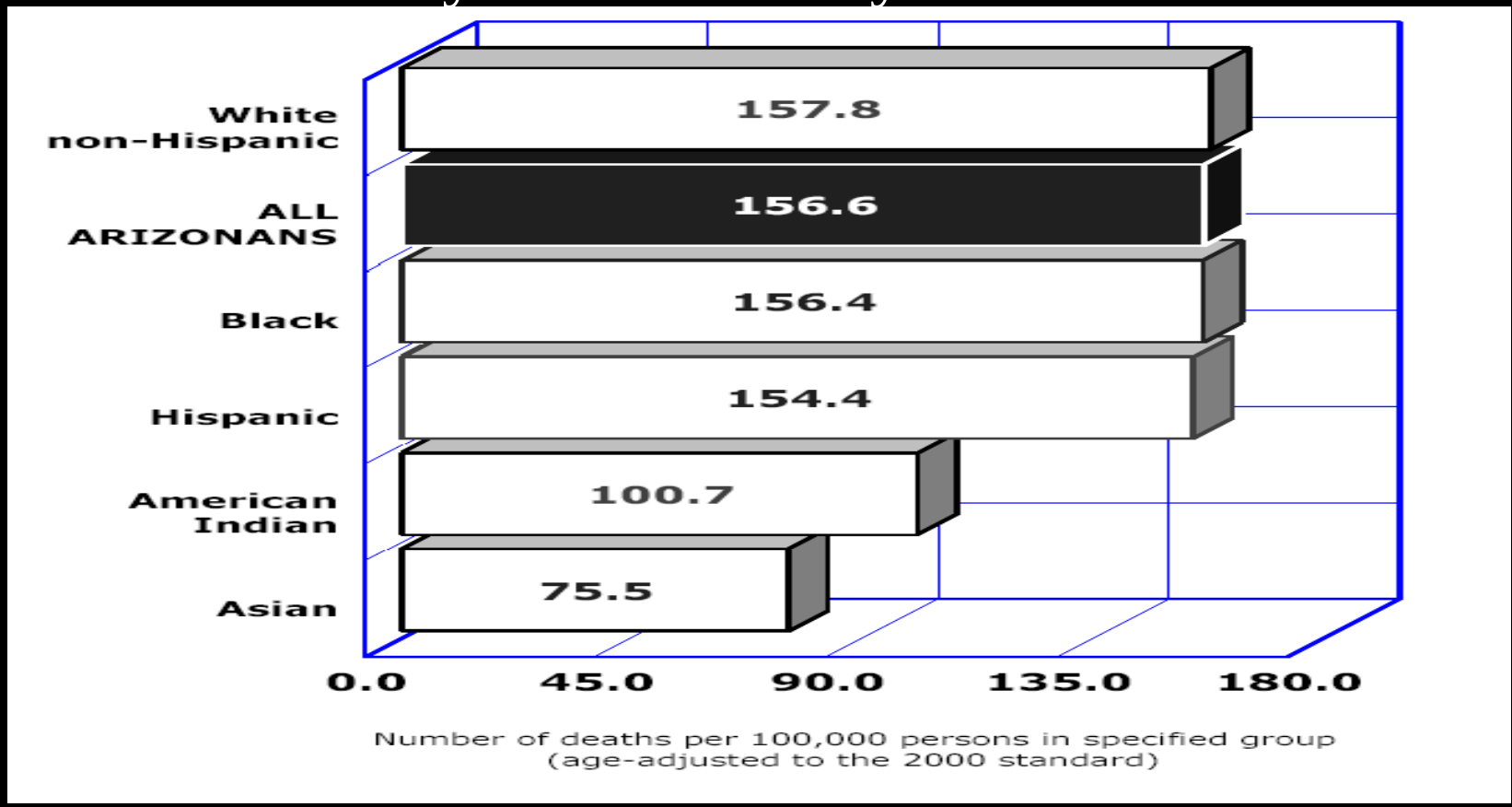
Mortality from Coronary Heart Disease



Differences in the Health Status Among Ethnic Groups, Arizona, 2003

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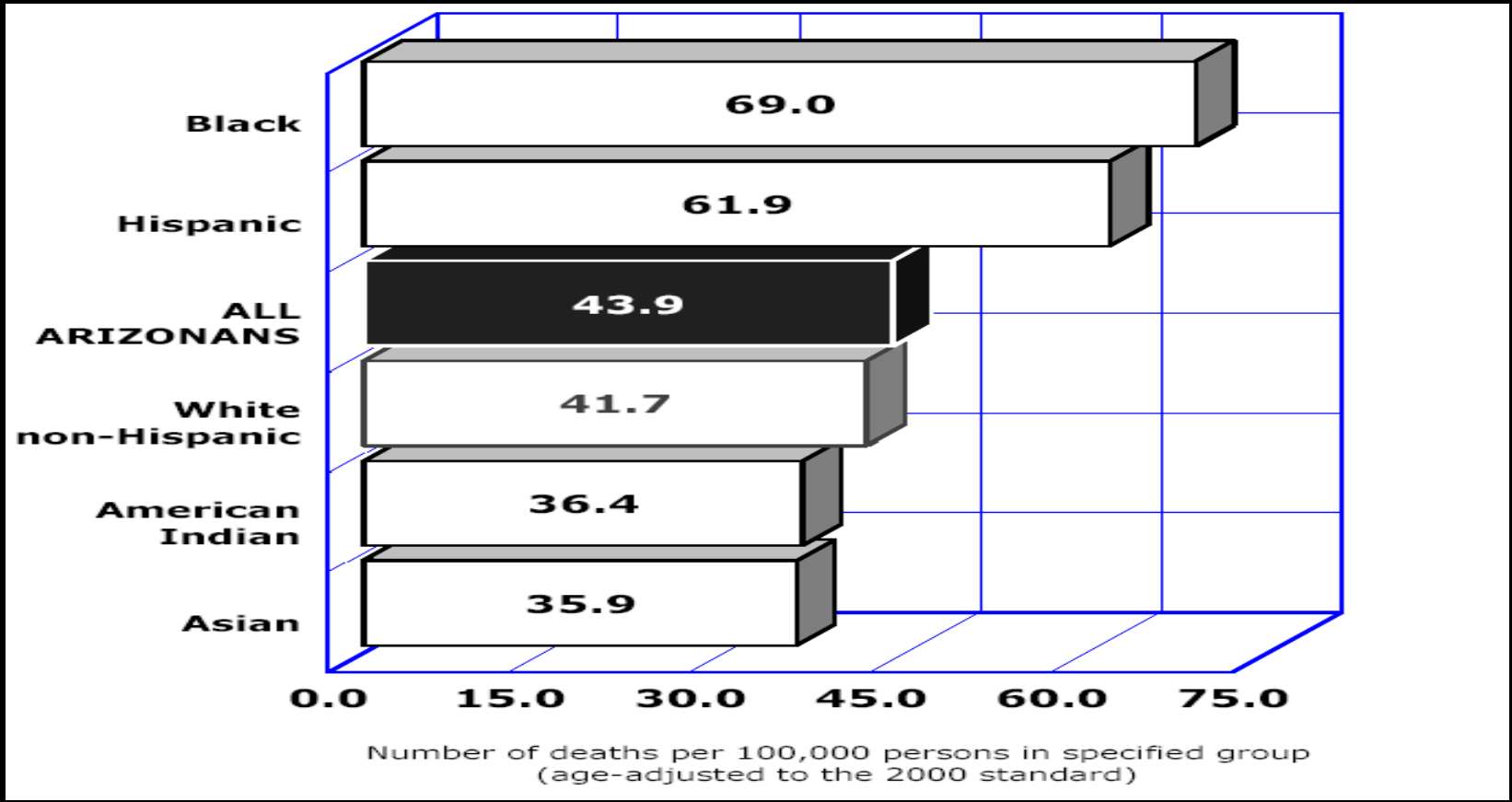
Mortality from Cerebrovascular Disease



Differences in the Health Status Among Ethnic Groups, Arizona, 2003

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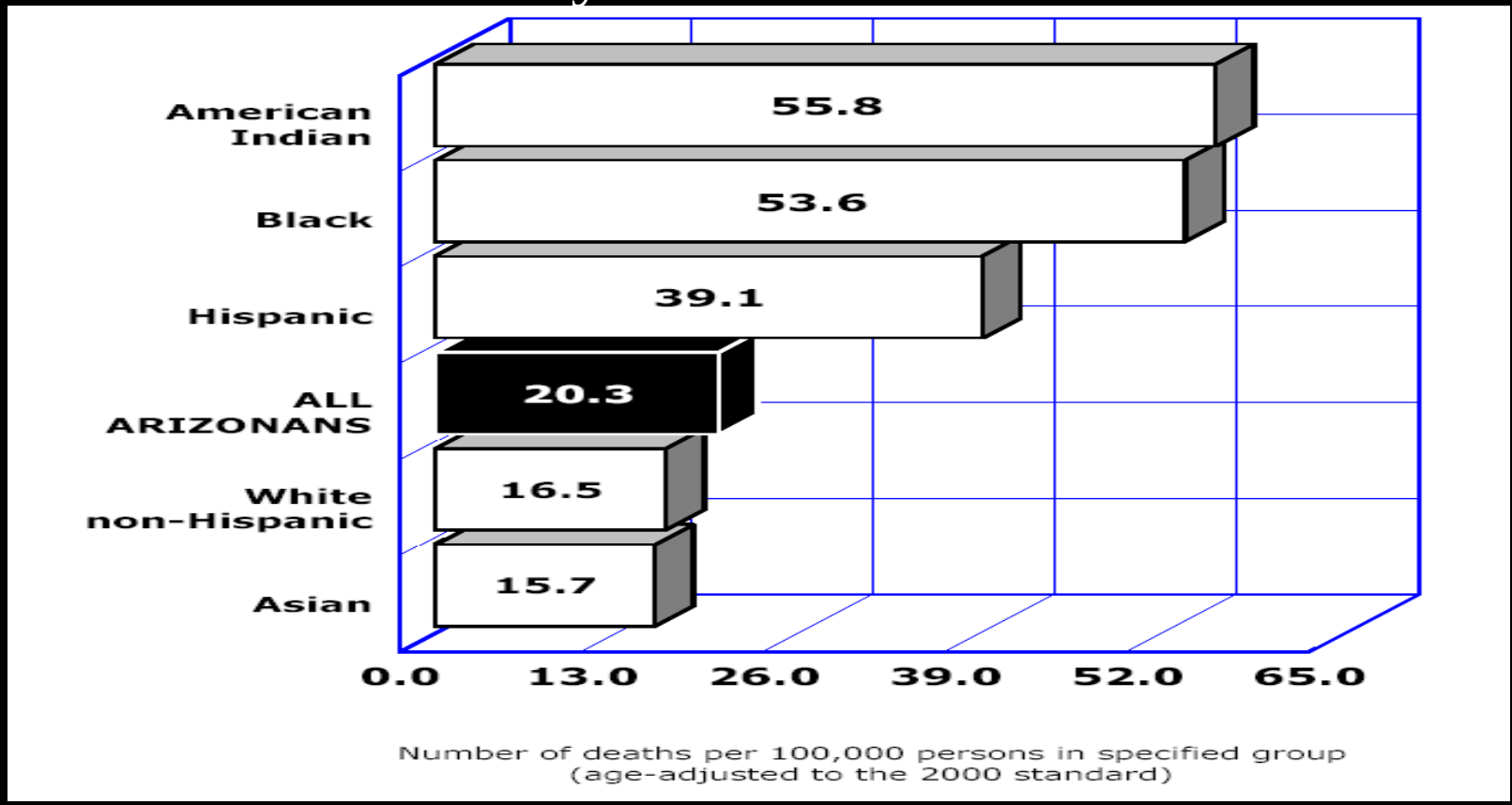
Mortality from Diabetes



Differences in the Health Status Among Ethnic Groups, Arizona, 2003

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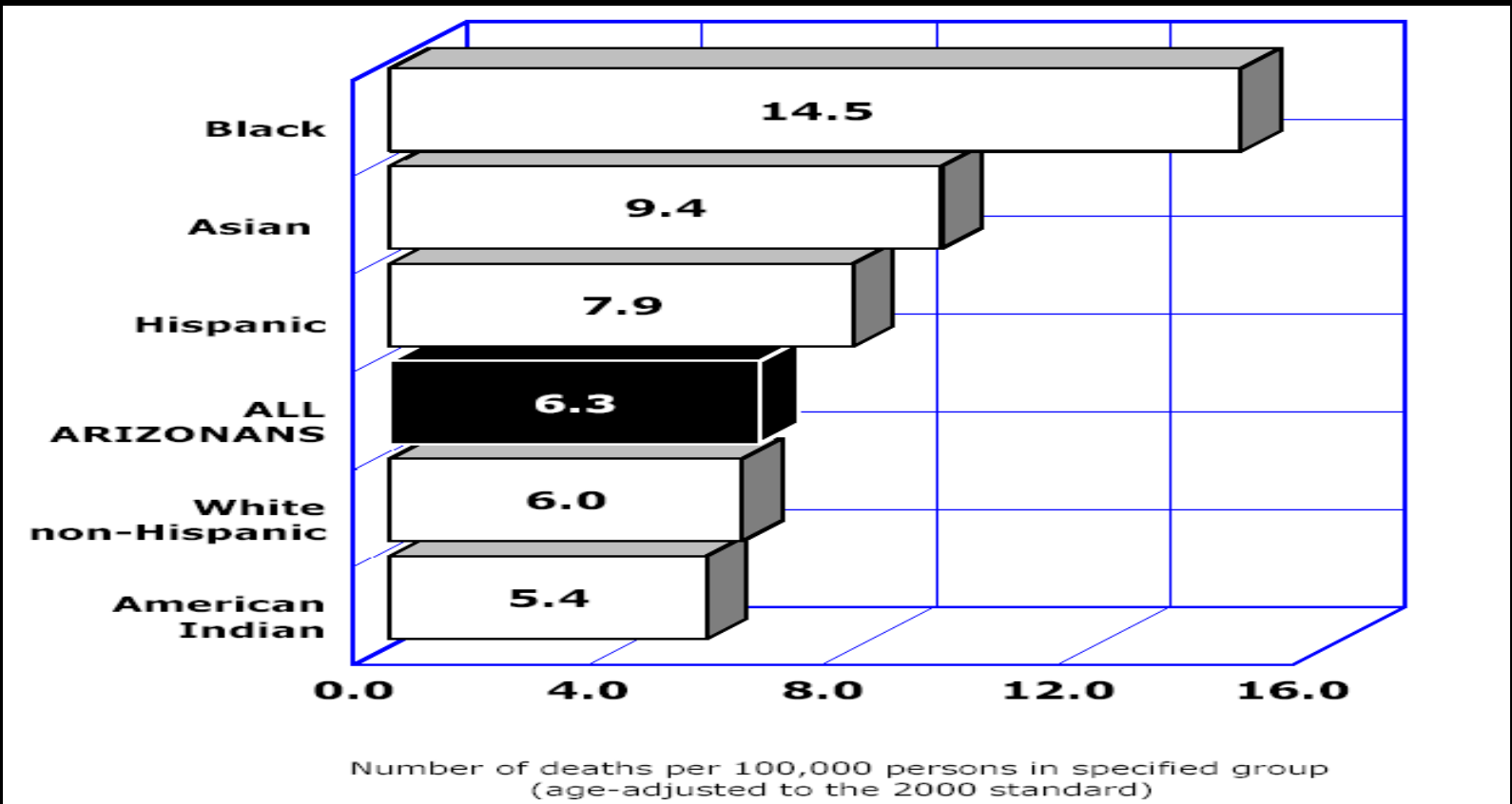
Mortality from Essential Hypertension



Differences in the Health Status Among Ethnic Groups, Arizona, 2003

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Disparities in CVD Treatment

"Of all the forms of inequality injustice in health is the most shocking and inhumane"

Dr. Martin Luther King, Jr.

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Question: Do Racial/Ethnic Minorities Receive Lower Quality Healthcare?

- **In 1999, Congress charged the Institute of Medicine (IOM) to:**
  - **Assess the extent of racial and ethnic disparities in healthcare**
  - **Identify the sources of these disparities**
  - **Suggest intervention strategies**
- **IOM study committee reviewed 100+ studies assessing quality of healthcare, holding constant variations in access-related factors and often other confounding factors**

Institute of Medicine. Summary of: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. 2003.

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Answer: Yes

"The study committee was struck by the consistency of the research findings: even among the better-controlled studies, the vast majority indicated that minorities are less likely than whites to receive needed services, including clinically necessary procedures. These disparities exist in a number of disease areas, including…cardiovascular disease…and are found across a range of procedures…"

Institute of Medicine. Summary of: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. 2003.

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Disparities in Health Care for Ethnic Minorities

African Americans with CAD or acute myocardial infarction are:

- less likely to receive appropriate cardiac; procedures or therapies;
- less likely to be catheterized;
- 20-50% less likely to undergo revascularization; &
- less likely to receive beta blockers, thrombolytic drugs, or aspirin therapy.

Comparisons with Hispanic populations are similar but less consistent

Asians and Native American numbers are small but such disparities are not often found

Kaiser Family Foundation. Racial/Ethnic Differences in Cardiac Care. The Weight of the Evidence, 2002

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Risk Factors for Disparate Healthcare

- Cultural issues
- Racism
- Discrimination/bias
- Language barriers
  - Healthcare literacy
- Geographical barriers
- Immigrant status
- Trust (or lack thereof)
- Socioeconomic status/poverty

Institute of Medicine. Summary of: *Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare*. 2003.

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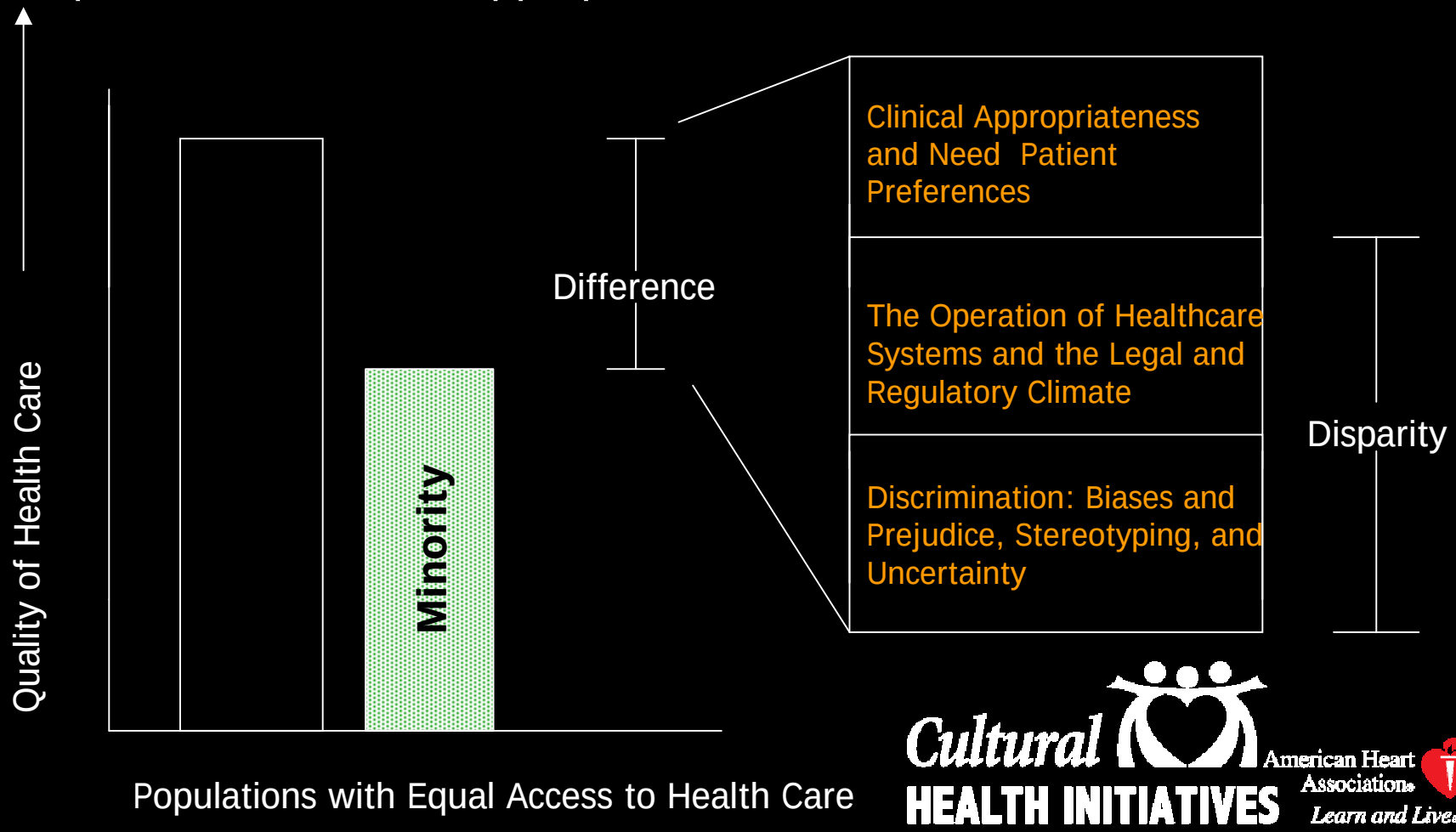
Differences, Disparities, and Discrimination

Disparities: racial or ethnic differences in healthcare that are not due to access related factors, clinical needs, patient preferences, or the appropriateness of the intervention.



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Strategic Imperatives

A Framework for Action

Mensah, GA. Eliminating Disparities in Cardiovascular Health: six strategic imperatives and a framework for action. Circulation. 2005;111:1332-1336

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CDC and AHA Recommendations

- Six Strategic Imperatives
- 10 Focal Areas
- 6 Major Settings

Mensah, GA. Eliminating Disparities in Cardiovascular Health: six strategic imperatives and a framework for action. Circulation. 2005;111:1332-1336

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Six Strategic Imperatives

1. Accelerate Health Impact in Disparate Populations
2. Advance Policy and Systems Change
3. Form Strategic Multidisciplinary Partnerships
4. Expand Community Based Participatory Research and Research Translation
5. Collect Healthcare Data by Race, Ethnicity, and Disparities Indicators
6. Ensure a Diverse Clinical and Public Health Workforce

Mensah, GA. Eliminating Disparities in Cardiovascular Health: six strategic imperatives and a framework for action. Circulation. 2005;111:1332-1336

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Ten Focal Areas

Access to Care	Geography & Local Environment
Quality of Care	Income & Education Levels
Patient preferences, utilization, and adherence	Psychosocial Stress
Patient culture & lifestyle	Prejudice, discrimination and bias
Regulations, policies, systems of care	Biology, Genomics, GE interaction

Mensah, GA. Eliminating Disparities in Cardiovascular Health: six strategic imperatives and a framework for action. Circulation. 2005;111:1332-1336

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Six Major Public Health Settings

1. Communities, cities, regions, states,
2. Schools and colleges
3. Work sites
4. Hospital Clinics doctor's offices emergency departments
5. Faith-based settings
6. Centers for training health professionals

Mensah, GA. Eliminating Disparities in Cardiovascular Health: six strategic imperatives and a framework for action. Circulation. 2005;111:1332-1336

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AHA's Cultural Health Initiatives

Driven by a diverse committee of volunteers representing all major settings

Mission:

CHI will facilitate AHA's reach into minority communities and to work within systems to reduce cardiovascular disease and stroke disparities for minority populations and the medically underserved.

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AHA's Cultural Health Initiatives Goal

To reduce the disparities and incidence of premature death and disability related to heart disease and stroke by 25% by 2010 in minority communities

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Five Major Markets

- Patients
- Healthcare
- Researcher/scientists
- General Public
- Public Officials

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Health Care Position

- Dedication to support and impact healthcare marketplace environment and to provide best science to providers who can then provide high quality care

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CHI Healthcare Activities

- Support *Get with the Guidelines* implementation in minority-serving hospitals
- Provide professional education on relevant topics
- Arizona Chronic Disease Disparities Conference

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AHA Patients Position

Work for patients and families by helping healthcare systems and providers deliver quality patient care and by making the best science accessible to patients, caregivers and families.

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CHI Patients Activities

- Provide minority-serving physicians with practical educational tools for their practices
- *Get with the Guidelines*
- Providing Healthcare Resource Guides

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AHA General Public Position

Work to advance groundbreaking research, spread knowledge, and help all Americans live longer lives

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CHI General Public Activities

- Community Partnerships
  - Search Your Heart—Hispanics/Latinos/APIs
  - Barbershop Blood Pressure Screening Program– African Americans
  - Honoring the Gift of Heart Health- American Indians/ Alaskan Natives
  - Friends and Family CPR Training
  - Family Meals Program

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CHI General Public Activities continued

Provide:

- Access to the Halle Heart Center
- Healthcare Resource Guides
- Media Awareness
- Survivor Network

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AHA Public Officials Position

- Be a credible, nonpartisan, source that public officials rely on for information about heart and stroke issues. Be proactive in the legislative and regulatory arena by advocating for public policies that advance our strategic priorities.

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CHI Public Officials Activity

- Work with AHA advocacy team to support monitor government attention and funding to minority health issues

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AHA Researchers and Scientists Position

AHA will provide timely unbiased cardiovascular and stroke science that meets professionals needs. Professional affiliation with the AHA helps build opportunities.

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CHI Researchers and Scientists Activities

- Support AHA in funding minority researches and ensuring minorities are participating in clinical trials
- Support AHA in advocating studies that target minorities

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“Knowing is not enough;
we must apply.

Willing is not enough;
we must do.”

Johann von Goethe

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QUESTIONS?

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